

What is Claimed Is:

1. A method for reducing a polygon effect that occurs during a course of a reversing of a chain of a pedestrian conveyor, the pedestrian conveyor moving at a speed and having a reversing wheel and an electric drive indirectly or directly acting on the reversing wheel, the method comprising the steps of:

driving the reversing wheel with an essentially constant rotational frequency;

detecting variations in the speed of the chain during the driving step; and

compensating for the variations in the speed of the chain by driving the reversing wheel with irregular rotation frequency such that a position dependent control of the speed is realized by superimposing a different rotational speed upon the rotational speed of the reversing wheel via the electric drive.

2. The method according to claim 1, wherein the method further comprises:

determining a mathematical function representing a set value and which is synchronized with the angular position of the reversing wheel while the pedestrian conveyor is operating.

3. The method according to claim 1, wherein the conveyor comprises spaced steps or pallets, the method further including using a chain having a chain pitch corresponding to one half of a step or pallet spacing.

4. The method according to claim 3, including using a chain having a pitch of approximately 200 mm.

5. The method according to claim 1, wherein the conveyor comprises spaced steps or pallets, the method further including using a chain having a chain pitch corresponding to a complete step or pallet.

6. The method according to claim 5, including using a chain having a pitch of approximately 400 mm.

7. A device for reducing the polygon effect that occurs during the course of the reversing of a chain in a pedestrian conveyor, comprising:

a reversing wheel;

at least one power supply unit;

an electric driving motor indirectly or directly acting upon the reversing wheel and coupled to the at least one gear and the at least one power supply unit such that the driving motor can be driven with a non-constant speed;

a function generator;

a controlling apparatus coupled to the function generator; and

at least one position sensor for detecting a phase position of the reversing wheel and transmitting the phase position to the controlling apparatus,

wherein the controlling apparatus transmits a synchronized set speed value to the power supply unit based on the phase position.

8. The device according to claim 7, wherein the function generator includes at least one mathematical function of the chain, the at least one mathematical function corresponding to entry of the chain in the reversing wheel.

9. The device according to claim 7, wherein the chain has a pitch corresponding to one half of a step or pallet spacing in the pedestrian conveyor.

10. The device according to claim 9, wherein the pitch is approximately 200 mm.

11. The device according to claim 7, wherein the chain has a pitch corresponding to a complete step or pallet spacing in the pedestrian conveyor.

12. The device according to claim 11, wherein the pitch is approximately 400 mm.

13. The device according to claim 7, wherein the power supply unit is a frequency converter.

14. The device according to claim 7, further comprising:

at least one gear coupled between the electric driving motor and the reversing wheel.